JAP15 Rec'd PCT/PTO 15 SEP 2006.

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SURMISSION UNDER 35 U.S.C. 371

MC1-8346

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5)

SUBMISSION UNDER 35 U.S.C. 371 10/593219										
INTER		AL APPLICATION NO. INTERNATIONAL FILING DATE T/GB2005/050036 15 MARCH 2005	TE CLAIMED 15 MARCH 2004							
TITLE OF INVENTION										
CAVITY RING-DOWN SENSING APPARATUS AND METHODS										
APPLICANT(S)FOR DO/EO/US ANDREW MARK SHAW										
		vith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:								
1.	\boxtimes	This is a FIRST submission of items concerning a submission under 35 U.S.C.371.								
2.		This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.								
3.		This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9), and (21) indicated below.								
14.	\boxtimes	The US has been elected (Article 31).								
5.	\boxtimes	A copy of the International Application as filed (35 U.S.C. 371(c)(2)).								
		a. is attached hereto (required only if not communicated by the Internat	tional Bureau).							
		b. has been communicated by the International Bureau.	•							
		c. is not required, as the application was filed in the United States Rece	eiving Office (RO/US).							
6.	\boxtimes	An English language translation of the International Application as filed (35 U.S.C. 371	An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).							
		a. is attached hereto.								
		b. has been previously submitted under 35 U.S.C. 154(d)(4).								
7.		Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).								
		a. are attached hereto (required only if not communicated by the Intern	ational Bureau).							
		b. have been communicated by the International Bureau.	₩.							
		c. have not been made; however, the time limit for making such amend	lments has NOT expired.							
		d. have not been made and will not be made.								
8.		An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).								
9.		An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).								
10.		An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).								
Items	11 to 20 be	below concern document(s) or information included:								
11.	\boxtimes	An Information Disclosure Statement under 37 CFR 1.97 and 1.98.								
12.		An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.								
13.	\boxtimes	A preliminary amendment.								
14.		An Application Data Sheet under 37 CFR 1.76.								
15.		A substitute specification.								
16.		A power of attorney and/or change of address letter.								
17.		A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.								
18.		A second copy of the published International Application under 35 U.S.C. 154(d)(4).								
19.		A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).								

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATIO	N NO. (if	known, see 37	CER 1.5)	INTERNATIONAL APP	LICATION NO.	ATTORNEY'S DOC	KET NUMBER
40	15	9321	9	PCT/GB2005/	050036	MC1-8	346
0.		er items or infor			· · · · · · · · · · · · · · · · · · ·		
The fo	llowing fo	ees have been s	ubmitted			CALCULATIONS	PTO USE ONLY
21.	Basi	c national fee (3	37 CFR 1.49	92(a))	\$300	\$300.00	
22.	Exar	Examination fee (37 CFR 1.492(c))			\$200.00		
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)							
23.	Sear	ch fee (37 CFR	1.492(b))		 	\$400.00	
•				al preliminary examination reports Article 33(1)-(4)	_		
				international application to the			:
	_			than the US and provided to the			
7		<u> </u>		l, 22 and 23 =		900.00	
A ddie	anal fac f				to (avaluding sequence		
				igs filed in paper over 100 shee c) or (e) or computer program li			
	-	FR 1.492(j)).	•				
The fe	e is \$250	for each addition	onal 50 shee	ets of paper or fraction thereof.	•		
Total Sheets	Ext	tra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number) RATE				
57-100=		0/50=			x \$250	\$0	
Surcharge of \$13 the date of comm				fee, examination fee, or the oat FR 1.492(h)).	h or declaration after	\$130.00	
CLAIMS NUMBER FILED		FILED	NUMBER EXTRA	RATE	\$		
Total Clain	ns .	59-20) ==	39	x \$50	\$1,950.00	
Independent C	aims	11-3=		8	x \$200	\$1,600.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		· · · · · · · · · · · · · · · · · · ·	0	+ \$360	\$0		
						\$4,580.00	
			OVE CALCULATIONS =	34,380.00			
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.							
					SUBTOTAL =	\$2,290.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).					\$		
				To	TAL NATIONAL FEE =	\$2,290.00	
Fee for recording	the enclo	sed assignment	(37 CFR 1	21(h)). The assignment must be	e accompanied by an	\$	
appropriate cover		-	-		+		
		· ·	\$2,290.00				
•		· · · · · · · · · · · · · · · · · · ·				Amount to be refunded:	
						Amount to be	
						charged	

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a.	\boxtimes	A check in the amount of \$2,290,00 to cover the above fees is enclosed.					
b.		Please charge my Deposit Account No. 20-0090 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c.	\boxtimes	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 20-0090. A duplicate copy of this sheet is enclosed.					
d.		Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should be included on this form. Provide credit card information and authorization on PTO-2038.					
		an appropriate time limit under 37 CFR 1.495 has not mational Application to pending status.	been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and grant				
TARO 1300 CLEV PHON	LLI, SUNDHE & TUMMINO, EAST NINTH ELAND, OH 4 E: (216) 621	H STREET, SUITE 1700 44114 21-2234	SIGNATURE Christopher P. Harris NAME				
I'AX: Çust	(216) 621 OMER NO.: 2		43,660 REGISTRATION NO.				